

NEW FORMS AND SPECIES OF THE GENUS
CATASTICTA—IV.

BY F. M. BROWN, A. G. GABRIEL, AND F. W. GOODSON.

Catasticta colla form **amba**, n. form.

Upperside: In many respects this form resembles *C. susiana* f. *plesseni* Roeber. On the forewings the dark basal area occupies about two-fifths of the inner margin. The limbal zone is uniformly about one-third the length of the inner margin in width. The limbal series is distinct and complete. The marginal series is present in the form of short light lines in the apical region. The nervules are rather heavily marked with dark scales. The basic light color is a tone of yellow buff, lighter than that on *colla* and darker and yellower than on *plesseni*.

On the hindwings the basal area occupies almost half of the cell. The limbal zone extends well into the end of the cell. The limbal and marginal series are complete, but indistinct. The spots of the limbal series are several times as large as those of the marginal series and are heavily suffused.

Underside: On this surface there is still more marked variation from *plesseni* with which this form might easily be confused. There is a slight but distinct yellowish cast over both wings. The nervules are sharply marked with dark brown scales. The limbal spots for the forewings are not crescent shaped.

On the hindwings the marginal series of triangles are straight sided not markedly incurved and the dark margins of these so extensive that in some specimens they almost obliterate the pearly submarginal series. In general the pattern on the underside is much richer than in *plesseni*.

Average length of the costa of the forewing: 26 mm. (23-27).

Type localities: All in southwestern Ecuador; Ambato, Zamora, Luja, San Francisco, Equito.

Repositories of the types:

The Holotype male: Ambato, Ecuador; British Museum, London, England.

The Paratype males 1-7; Zamora, Ecuador 3-4000 feet; Zoological Museum, Tring, England.

Paratype males 8-9; Ecuador; Zoological Museum, University of Berlin, Germany.

Paratype male 10; Loja, Ecuador: Paratype male 11; Rio Num-bala, Ecuador: Paratype male 12; San Francisco, Ecuador: Paratype male 13; Rio Verde, Ecuador 5000 feet; 10-13 in British Museum, London, England.

Paratype male 14; Equito, Ecuador: Paratype male 15; no data; both in the Zoological Museum, Tring, England.

A MODIFICATION OF THE FEEDING REACTION OF AESCHNA.

BY CYRIL E. ABBOTT, Searcy, Ark.

Last summer a student brought into the laboratory the larva of some species of aeschnid dragonfly. It occurred to me that it might be interesting to discover what would happen to the insect with the labium removed. I therefore ligated the organ close to the head, and amputated the structure just distad of the ligation. The insect did not appear to suffer seriously from the operation, as it lived for about a month longer.

Of course without the extensible labium the insect could not capture prey, and at first it made no reaction even to food brought close to the head. After a few days it consumed food placed in the mandibles. A little later it moved toward the food offered, at first rather indifferently, but later with all the activity characteristic of the normal insect.

Suddenly it developed the habit of "leaping" on its prey: that is, upon seeing a moving object two or three centimeters away, it would first turn to face the object; then, by a forcible ejection of water from the brachial sack, it would move rapidly upon the object, at the same time "snapping" at it with the jaws. This maneuver, awkward as it was, occasionally resulted in a capture.

It would be interesting to experiment further with a number of specimens to discover if such modifications in behavior are general, but unfortunately, at the time, I was unable to obtain other specimens. In any case such a striking alteration in behavior to meet a contingency which practically cannot occur to a specimen living under field conditions illustrates the remarkable flexibility in the behavior of an animal generally supposed to depend entirely upon reactions which are inherited, automatic, and fixed.